IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Kenneth Glynn	Examiner:	Gerald Gauthier
Serial No.	10/696,660	Group Art Unit:	2614
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Title: VOICE ACTIVATED, VOICE RESPONSIVE PRODUCT LOCATOR SYSTEM, INCLUDING PRODUCT LOCATION METHOD UTILIZING PRODUCT BAR CODE AND AISLE-SITUATED, AISLE-IDENTIFYING BAR CODE

Customer No.: 33717

CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence and identified enclosures are being transmitted electronically to the United States Patent and Trademark Office via the EFS Web e-Filing system on March 28, 2007.

Name: Melissa Lusian

AMENDMENT

MAIL STOP AMENDMENT
Commissioner for Patents

Sir/Madam:

Kindly enter the following amendments:

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks begin on page 14 of this paper.

ADDITIONAL CLAIM FEES

Claims Remaining After Amendment		Highest Number Previously Paid For		Present Extra		Rate		Fee
Total Claims								
50	-	20	=	30	x	50.00	=	$ 1,500
Independent Claims								
7	-	3	=	4	x	200.00	=	$ 800
TOTAL FILING FEE								$ 2,300

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AMENDMENTS TO THE CLAIMS

Claims 1-20 (Cancelled)

Claim 21 (Currently Amended) An item locator system having both voice activation and voice responsive capabilities for location feedback to locate one or more specific items, which comprises:

a.) a plurality of sets of different items, each set having at least one item therein, ~~each set having at least one item therein,~~ each set having a specified location, and each set having its own unique item-identifying bar code, with at least one item of each set having said unique item-identifying bar code located thereon;

b.) a plurality of specified locations, each location having at least one of said plurality of sets of different items located thereon, each location of said plurality of locations having a unique location-identifying bar code, each of said plurality of locations having ~~a~~ said unique location-identifying bar code physically situated thereon;

c.) a support structure, for physically supporting said system at one or more locations, and functionally containing or connected to the following components:

d.) a continuous speech recognition digital signal processor (DSP);

e.) a programmable microprocessor interfaced with said speech recognition DSP;

f.) sufficient programming and circuitry contained within said programmable microprocessor to provide for voice activation and voice recognition and response, and having item-identification/corresponding location-identification ~~identification~~ data pairs obtained from said unique item-identifying bar codes and said unique location-identifying bar codes, so as to provide item location information to a user;

g~~f~~.) voice input means connected to said speech recognition DSP; ~~and~~

h~~g~~.) memory storage means connected to said programmable microprocessor for storage of operational inputs, control inputs, voice recognition vocabulary for storage of command match and execute functions; and

i.) at least one user feedback unit and connection from said programmable microprocessor to said at least one user feedback unit, said at least one user feedback unit adapted to provide feedback selected from the group consisting of audio feedback, visual feedback and combinations thereof, to a user in response to an item location query wherein said feedback is selected from the group consisting of an answer, default instructions and combinations thereof.

Claim 22 (Previously Presented) The system of claim 21 wherein said unique item-identifying bar code is a universal price code.

Claim 23 (Previously Presented) The system of claim 21 wherein unique item-identifying bar code is a bar code which corresponds to a location selected from the group consisting of aisle, row, shelf, bin, drawer and floor space area.

Claim 24 (Previously Presented) The system of claim 21 wherein said unique item-identifying bar code is a bar code which includes code for genus data and for species data.

Claim 25 (Previously Presented) The system of claim 24 wherein said genus data is row or aisle data, and said species data is bin, drawer or shelf data.

Claim 26 (Previously Presented) The system of claim 21 which said programming includes software which is capable of receiving bar code reader inputs and converting said bar code reader inputs to item-identification/corresponding location-identification data pairs for location information.

Claim 27 (Previously Presented) The system of claim 21 wherein said user feedback unit includes visual display means for viewing visual feedback being selected from the group consisting of text, map and a combination thereof.

Claim 28 (Currently Amended) The system of claim 21 wherein said user feedback unit includes sufficient hardware and software to provide audio feedback to a user in response to recognizable speech.

Claim 29 (Previously Presented) The system of claim 21 wherein said memory storage means further includes flash ROM storage and provides for remote diagnostics and system programming.

Claim 30 (Previously Presented) The system of claim 21 wherein said voice input means includes a microphone.

Claim 31 (Previously Presented) The system of claim 21 which further includes a secured manual control panel for input and management of item and location data into said system.

Claim 32 (Previously Presented) The system of claim 31 wherein said manual control panel further contains a keypad and menu for operation and programming options, a microphone, a screen for input and feedback display.

Claim 33 (Currently Amended) The system of claim 21 in which the ~~additional~~ components further include ~~includes~~ an audio feedback component which includes audio feedback hardware and software adapter to audibly respond to recognizable voice input, including digital-to-analog conversion and an output speaker.

Claim 34 (Previously Presented) The system of claim 21 wherein said DSP includes a continuous speech recognition engine having a continuous speech signal recognizer and a continuous speech signal interpreter.

Claim 35 (Previously Presented) The system of claim 34 wherein said continuous speech recognition engine utilizes tokens of raw acoustic signals representing utterances or words and

matches these against a set of models and then relies upon likelihood to select a most likely model to decode signals for interpretation.

Claim 36 (Currently Amended) The system of claim 21 which further includes at least one bar code reader connected to said microprocessor, and said connected reader is selected from being directly connected and being wirelessly connected to said microprocessor.

Claim 37 (Currently Amended) The system of claim 36 which further includes at least one bar code reader connected to said microprocessor, and said connected reader is selected from being directly connected and being wirelessly connected to said microprocessor.

Claim 38 (Previously Presented) The system of claim 21 which further includes a secondary processor being adapted to receive and translate bar code reader inputs thereto and having sufficient software to create item location information by matching item-identification bar code readings and corresponding location-identification bar code readings, and to communicate with said microprocessor.

Claim 39 (Currently Amended) The system of claim 38 which further includes at least one bar code reader connected to said secondary processor, and said connected reader is selected from being directly connected and being wirelessly connected to said secondary processor.

Claim 40 (Previously Presented) The system of claim 38 which said secondary processor is adapted to convert said item location information into continuous speech recognition digital signals.

Claim 41 (New) A method of creating data for locating one of a plurality of items in a facility, comprising:

using a first set of bar codes to determine item identity for each of the plurality of items; and

using a second set of bar codes to determine the location of at least one of the plurality of items, wherein the second set of bar codes are physically located on portions of the facility.

Claim 42 (New) The method of claim 41 further comprising:

reading the location data from the second set of bar codes in conjunction with the item identification data from the first set of bar codes; and

storing the location data and the item identification data for use as resource data in a memory.

Claim 43 (New) The method of claim 42 wherein reading the location data comprises reading using a bar code reader.

Claim 44 (New) The method of claim 41 wherein the portions of the facility comprise one or more of the following: aisle ends, shelf edges, bin walls, and parking spaces.

Claim 45 (New) A locator system for a user to locate one of a plurality of items in a facility, comprising:

at least one processor, adapted to provide feedback to the user regarding the location of the one of the plurality of items;

a database, coupled for access by the at least one processor, storing location information for each of the plurality of items;

a bar code reader operable to use a first set of bar codes to determine item identity for each of the plurality of items, and to use a second set of bar codes to determine the location for each of the plurality of items, wherein the second set of bar codes are physically located on portions of the facility; and

wherein the at least one processor is adapted to create the location information by matching the first set of bar codes with corresponding ones of the second set of bar codes.

Claim 46 (New) The locator system of claim 45 wherein the bar code reader is operable to communicate wirelessly with the at least one processor.

Claim 47 (New) A locator system comprising:

a local processor residing in a facility;

a database, coupled for access by the local processor, storing location information for each of a plurality of items in the facility;

an input interface, coupled to the local processor, for accepting a request by a user for the location of at least one of the plurality of items; and

a controller, coupled to the local processor, operable to provide feedback to the user regarding the location of the at least one of the plurality of items, wherein the feedback is selected from the group consisting of audio feedback, visual feedback and combinations thereof, and wherein the form of the feedback is selected from the group consisting of an answer, default instructions and combinations thereof.

Claim 48 (New) A system for creating an item location directory to locate one or more specific items, comprising:

a plurality of sets of different items, each set having at least one item therein, each set having a specified location, and each set having a unique item-identifying bar code, with at least one item of each set having said unique item-identifying bar code located thereon;

a plurality of specified locations, each location having at least one of said plurality of sets of different items located thereat, each location of said plurality of locations having one unique location-identifying bar code, each of said plurality of locations having a said unique location-identifying bar code physically situated thereon;

at least one bar code reader for reading said item-identifying bar codes and said location-identifying bar codes;

at least one processor adapted to receive inputs from said at least one bar code reader; and

sufficient programming within said at least one processor to provide recognition, organization, storage and presentation of item-identification/corresponding location-identification data pairs obtained from said item-identifying bar codes and said location-identifying bar codes, so as to create an item location directory therefrom wherein said unique item-identifying bar code is a universal price code bar code.

Claim 49 (New) The system of claim 48 wherein said unique location-identifying bar code is a bar code which corresponds to a location selected from the group consisting of aisle, row, shelf, bin, drawer and floor space area.

Claim 50 (New) The system of claim 48 wherein said unique location-identifying bar code is a bar code which includes code for genus data and for species data.

Claim 51 (New) The system of claim 50 wherein said genus data is row or aisle data, and said species data is bin, drawer or shelf data.

Claim 52 (New) The system of claim 48 wherein said programming includes software which receives bar code reader inputs and converts said received inputs to item-identification/corresponding location-identification data pairs for location information.

Claim 53 (New) The system of claim 48 wherein said system includes a user feedback unit which includes visual display means for viewing visual feedback in the form of text, or map or a combination thereof.

Claim 54 (New) The system of claim 48 wherein said location-identifying bar codes are universal price code bar codes assigned to specific locations and are different from all item-identifying bar codes contained within the system, and wherein said processor is programmed to correlate said location-identifying bar codes in their assigned locations.

Claim 55 (New) The system of claim 48 wherein said location-identifying bar codes are universal price code bar codes assigned to specific locations that are different from all item-identifying bar codes contained within the system, and wherein said at least one processor is programmed to correlate said location-identifying bar codes to their assigned locations.

Claim 56 (New) The system of claim 48 which further includes at least one directory selected from the group consisting of printed directory, on-screen directory, on-line directory, audible directory and combinations thereof.

Claim 57 (New) A method of creating data for directories for locating items, comprising:

for a plurality of different sets of items, each set's items being different from items of other sets, and each set containing at least one item, and each set having a specific location, providing a unique item-identifying bar code on at least one item of each set of items;

physically applying unique location-identifying bar codes to at least one item of each set of items, said location-identifying bar codes representing the specific location of the item to which it is applied;

reading said item-identifying bar codes and said location-identifying bar codes in a predetermined sequence to create item/corresponding location data and inputting said data to a processor for assemblage into a directory format and for storage thereof for subsequent directory retrieval; and

wherein said item-identifying bar codes are universal price code bar codes.

Claim 58 (New) The method of claim 57 wherein location-identifying bar codes are each physically applied to items to represent a specific item location selected from the group consisting of aisle, row, shelf, bin, drawer and floor space area.

Claim 59 (New) The method of claim 57 further comprising creating said unique location-identifying bar codes prior to applying them to said items.

Claim 60 (New) The method of claim 59 wherein said unique location-identifying bar codes are created from universal price code bar codes which are not included in the item-identifying bar codes.

Claim 61 (New) The method of claim 57 wherein said bar codes are read with a bar code reader which is connected directly to said processor, is connected indirectly to said processor, or is connectable to said processor.

Claim 62 (New) The method system of claim 57 wherein said bar codes are read with a bar code reader which is wirelessly connected to said processor.

Claim 63 (New) The method of claim 57 further comprising utilizing a secondary processor, to receive and translate bar code reader inputs thereto and to create item/corresponding location information in a voice-enabling format.

Claim 64 (New) An item locator system for locating one or more specific items, comprising:

a plurality of sets of different items, each set having at least one item therein, each set having a specified location, and each set associated with an item-identifying bar code, with at least one item of each set having said unique item-identifying bar code located thereon;

a plurality of specified locations, each location having at least one of said plurality of sets of different items located thereat, each location of said plurality of locations associated with a unique-location identifying bar code, each of said plurality of locations having said unique location-identifying bar code physically situated on at least one item from each set of items to be located at that location;

a microprocessor programmed to provide voice recognition and response, and to process item-identification/corresponding location-identification data pairs obtained from said unique item-identifying bar codes and said unique location-identifying bar codes, so as to provide item location information to a user; and

at least one user feedback unit, coupled to said microprocessor, adapted to provide feedback selected from the group consisting of audio feedback, visual feedback and combinations thereof, to a user in response to an item location query wherein said feedback is selected from the group consisting of an answer, default instructions, a query, and combinations thereof.

Claim 65 (New) The system of claim 64 further comprising:

memory storage coupled to said microprocessor for storage of operational inputs, control inputs, and voice recognition vocabulary for storage of command match and execute functions;

at least one support, to physically support said system at one or more locations; and

a continuous speech recognition digital signal processor (DSP) coupled to said microprocessor.

Claim 66 (New) The system of claim 64 wherein said microprocessor is programmed to receive bar code reader inputs and to convert said bar code reader inputs to item-identification/corresponding location-identification data pairs for said item location information.

Claim 67 (New) The system of claim 64 wherein said user feedback unit includes visual display means for viewing visual feedback selected from the group consisting of a text, a map and combinations thereof.

Claim 68 (New) The system of claim 64 further comprising at least one bar code reader wirelessly coupled to said microprocessor.

Claim 69 (New) The system of claim 64 further comprising a secondary processor, coupled to communicate with said microprocessor, adapted to receive and translate bar code reader inputs and to create said item location information by matching item-identification bar code readings and corresponding location-identification bar code readings.

Claim 70 (New) The system of claim 69 further comprising at least one bar code reader coupled to said secondary processor.

REMARKS

In this response, new claims 41-70 have been added. Thus, claims 21-70 are now pending in this application. Claims have been amended as indicated above. Claims 21-40 were allowed in their form prior to amendment herein, and are believed still allowable.

Independent claims 41, 45, 48, 57, and 64 are believed allowable at least for their recitation of the use of an item code and a location code. Independent claim 47 is believed allowable for at least the Examiner's statement of reasons for allowance provided in the prior notice of allowability.

Applicant's other claims depend, directly or indirectly, from the independent claims above, and are believed allowable for the reasons discussed above.

In view of the above, Applicant respectfully requests the reconsideration of this application and the allowance of all pending claims.

Respectfully submitted,

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